



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,430	07/25/2006	Karl Freudelsperger	72272	1848
23872	7590	07/31/2009		
MCGLEW & TUTTLE, PC P.O. BOX 9227 SCARBOROUGH STATION SCARBOROUGH, NY 10510-9227			EXAMINER FOX, CHARLES A	
			ART UNIT 3652	PAPER NUMBER
			MAIL DATE 07/31/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/597,430

Applicant(s)

FREUDELSPERGER, KARL

Examiner

Charles A. Fox

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
- Paper No(s)/Mail Date 20060725
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the locking means as in claim 12 and the holding means as in claim 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Each and every structural element must have a references numeral and be shown in the drawings and have a structural description in the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f). The first paragraph of the specification should be amended to omit the incorporation by reference. The priority claim should remain.

The disclosure is objected to because of the following informalities: paragraphs 5 and 9 do not make sense as to what exactly they are trying to convey. Applicant should carefully review the specification to ensure that it is properly translated and make sense throughout. The above instances are only examples and are not necessarily exhaustive. Appropriate correction is required.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In the instant case reference numerals should be deleted.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 12 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for locking means for blocking the shelf unit, does not reasonably provide enablement for what they are comprised of. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to build and use the invention commensurate in scope with these claims. There is no disclosure detailing the locking means and they are not shown in any figure. As it can not be determined what structure is being claimed this claim can not be treated on the merits at this time.

Claim 11 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for holding and fixing means for the elevator, does not reasonably provide enablement for what they are comprised of. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to build and use the invention commensurate in scope with these claims. There is no disclosure detailing the locking means and they are not shown in any figure. In the art rejections below it is broadly treated as any structure which can

hold the storage and retrieval device on an elevator. Clarification is required and no new matter should be introduced.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 9 have the phrase "or the like" which is indefinite. Claims 2-8 and 10-21 depend from claims 1 and 9 respectively and have the same indefiniteness problems based upon their dependency.

Regarding claims 15 and 16 it is not clear how to displace a path horizontally. The paths do not move, but rather the storage and retrieval units are displaced.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7,9-11,13-18,20 and 21 are rejected under 35 U.S.C. 102(a) as being anticipated by Plutt et al.

Regarding claims 1 and 3 Plutt et al. US 6,639,879 discloses a method of operating a shelf system comprising the steps:

providing one or more vertically stacked shelf section, each having a plurality of vertically stacked individual shelves therein;

providing at least one storage and retrieval unit for placing and picking objects from the individual shelves;

vertically transferring the storage and retrieval unit between the shelf sections via an elevator.

Regarding claim 2 Plutt et al. also disclose placing the storage and retrieval unit onto a shelf section without a robot thereon.

Regarding claims 4 and 5 Plutt et al. also disclose displacing a storage and retrieval unit at a height above the ground from one row of shelf section to another row of shelf sections at the same height or at a vertically displaced height as needed relative to the ground via the elevator system.

Regarding claim 6 Plutt et al. also disclose the step of withdrawing the object holding portion of the storage and retrieval unit into a compact flat withdrawn position prior to transferring the storage and retrieval unit to another location.

Regarding claim 7 Plutt et al. also disclose the storage and retrieval units as being transferred from one shelf section to another while holding a container.

Regarding claim 9 Plutt et al. disclose a shelving system comprising:
one or more vertically stacked shelving units;
each unit being made up of a plurality of vertically stacked individual shelves;
a plurality of storage and retrieval unit for moving containers onto and off of the individual shelves;

a vertical elevator for transferring the storage and retrieval unit from a first shelving unit to second shelving unit spaced either above or below the first shelving unit.

Regarding claims 10 and 14 Plutt et al. also disclose the elevator as being at one or both longitudinal ends of the shelving system.

Regarding claim 11 Plutt et al. further disclose the elevator as having a holding and fixing means for the storage and retrieval unit for maintaining its position during vertical transfer.

Regarding claim 13 Plutt et al. further disclose the elevator as having a cage for receiving a storage and retrieval unit, said cage vertically displaceable between at least two shelving section.

Regarding claims 15 and 16 Plutt et al. also disclose displacing a storage and retrieval unit at a height above the ground from one row of shelf section to another row of shelf sections at the same height or at a vertically displaced height as needed relative to the ground via the elevator system.

Regarding claim 17 Plutt et al. further disclose the storage and retrieval units as being mounted on an upper and a lower fixed horizontal rail such that they tilt relative to the shelving units face.

Regarding claims 18 and 20 Plutt et al. also disclose the storage and retrieval units each have a vertical mast with a height adjustable load receiving means thereon for positioning containers on different individual shelves on each shelving unit, wherein said mast extends at least over the height of a shelving unit.

Regarding claim 21 Plutt et al. also disclose withdrawing the object holding portion of the storage and retrieval unit into a compact flat withdrawn position prior to transferring the storage and retrieval unit to another location.

Claims 1,8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Schröder. Regarding claim 1 Schröder US 5,096,355 discloses a method of operating a shelf system comprising the steps:

- providing one or more vertically stacked shelf section, each having a plurality of individual shelf areas therein;

- providing at least one storage and retrieval unit for placing and picking objects from the individual shelves;

- vertically transferring the storage and retrieval unit between the shelf sections via an elevator.

Regarding claim 8 Schröder also discloses the step of providing the objects being stored to the system via a conveyor separate from the storage and retrieval units, said conveyor used to place the items onto said storage and retrieval units prior to storing the objects on said shelves.

Regarding claim 9 Schröder discloses a shelving system comprising:

- one or more vertically stacked shelving units;

- each unit being made up of a plurality of individual shelf sections;

- a plurality of storage and retrieval unit for moving containers onto and off of the individual shelves;

a vertical elevator for transferring the storage and retrieval unit from a first shelving unit to second shelving unit spaced either above or below the first shelving unit.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Plutt et al. as applied to claim 18 above, and further in view of Nakashima et al. Plutt et al. teach the limitations of claim 18 as above, they do not teach as articulated joint between the mast and the running structure of the storage and retrieval device. Nakashima et al. US 6,443,264 teaches a stacker crane with a vertical mast with an upper section (110) that is connected to a track running drive (108) via articulated joints such as illustrated by element (129). It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Plutt et al. with a joint as taught by Nakashima et al. in order to allow a slight misalignment between the top and bottom sections supporting the vertical mast, thereby decreasing the chance of jamming the storage and retrieval device on the upper and lower tracks.

The prior art made of record and not relied upon, but considered pertinent to applicant's disclosure is listed on the attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 571-272-6923. The examiner can normally be reached on 7:00-4:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on 571-272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles A. Fox/
Primary Examiner, Art Unit 3652